

An Integrated National Waste Management Strategy, Reflecting Principles of Fairness

**Jim Williams, for Barbara Byron: WGA HLW Committee
BRC meeting in Denver, July 13, 2011**

Long-Standing WGA Resolutions

It is the objective of the WGA to support the options for the disposition of spent nuclear fuel, consistent with the principles of science, fairness, safety, environmental protection and equity.

(Res. 11-3: B4)

Past implementation of the NWPA appeared to be more focused (on).....**transfer waste for storage or disposal in the West** rather than a national program whose **disposal, storage and transportation components are logically interrelated.**

(Res. 11-3: A7)

History #1:

Legislated Criteria for “Fairness” and “Equity” (NWPA of 1982)

Painstakingly negotiated by Congress; reflected in legislation:

- a) A first repository to be sought in the West, a second in the East;**
- b) Each repository to be selected from several candidates.....”select the most suitable”;**
- c) Capacity limits on the first repository until the second is in operation;**
- d) The first consolidated storage facility was presumed to be in the East.**
- e) Consolidated storage linked to the development of permanent disposal;**
- f) Consolidated storage and permanent disposal.....not in same state;**
- g) Secretary authorized (Section 135) to provide short-term/near-site storage capacity for limited amounts (up to 1,900 MTU) of spent fuel.**

History #2:

Abandonment of Legislated Criteria (NWPA Amendments of 1987) => => => Mistrust

- a) First at Yucca. No repository in East.**
- b) Other candidate sites set aside (Is the selected site the best available?)**
- c) Advocacy to remove Yucca capacity limits.**
- d) Discontinue eastern consolidated storage.**
- e) Consolidated storage sought in AZ, NM, WY, UT.....not in eastern 35.
“Staged storage” at Yucca => 40,000 MT consol. Storage**

To get the NW program “back on track” (BRC Draft, pg. 44-45)

- f) Remove link between consolidated storage and disposal.**
- g) No short-term/near-site strg. sought; “Plan D” not considered.**

BRC Draft Report (July 29, 2011):

Key Recommendations:

- New organization; Access to NWF;
- Geologic disposal (1 or more);
- Consolidated storage (1 or more; capacity expandable; term extendable)

“All of them are necessary to establish a truly integrated national nuclear waste management system.....” (BRC Draft, pg. iv)

Not so clear:

- **How to establish** a “truly integrated national system”?
- **Whether** such should reflect **principles of fairness and equity?**
- How would we know?

An Integrated National Strategy: System Components

Inventory:

- Current and projected;
- SNF and HLW

Generic methods:

- Storage: Short-term/Near Site; Consolidated Storage
- Disposal: Geologic disposal; Deep boreholes
- Transportation: Short-haul (small quantities); Cross-country

Distribution/Geography:

- Generation (75 sites);
- Receiving (2-3 major sites, from 5-7 considered)

Time:

- Short-term: 2,012 thru 2,030;
- Medium-term: 2,030 thru 2,100;
- Permanent: 2,100 thru 302,100

Many combinations/configurations; each with implications:

- Science and safety
- Environmental and community protection
- Fairness and equity
- Cost (engineering and process)
- Logistics
- *Regional politics: Consequences in implementation*

How Might the BRC Create An Integrated National Waste Management System Reflecting Principles of Fairness?

Two Basic Options

- 1. Specify legislative criteria: As in NWPA-82.....updated
I.e. “A set of basic initial siting criteria” (BRC: pg vii)
Problem #1: BRC constraint vs. “siting.”
Problem #2: Avoiding “siting” has regional implications.**
- 2. Specify a legislatively recommended process**
 - New organization considers alternative configurations.**
 - An independent commission formed for national review.**
 - Based on commission recommendations, new organization forms integrated strategy.**
 - Congress reviews and approves, on an up or down votes.**
 - If major departure required, re-visit.**